# POLYTROPE® STR 1032EU-01 NATURAL

Good Melt Strength

## **Enhanced TPO Polyolefin**

A. Schulman Inc.

General Information

Features

#### Message:

POLYTROPE STR 1032EU resin is a cost efficient, high melt strength thermoformable TPO material that provides an economical balance of impact resistance and stiffness similiar to ABS, but provides the benefits of dimensional stability, chemical and weathering resistance characteristic of TPO materials. It can be extruded in smooth or textured surfaces, or co-extruded with a POLYTROPE STR enhanced polyolefin cap resin to further customize its' durability, appearance, or feel for interior and exterior applications. The capability of POLYTROPE STR 1032EU to provide an exceptionally smooth surface in extrusion and thermoforming makes it well suited to lamination processes with decorative films. It is also easily colored and is paintable by standard TPO paint systems.

	Good Toughness		
	Good Weather Resistance		
	Low CLTE		
	Paintable		
	Recyclable Material		
Forms	Pellets		
Processing Method	Coextrusion		
	Extrusion		
	Profile Extrusion		
	Sheet Extrusion		
	Thermoforming		
Physical	Nominal Value	Unit	Test Method
Specific Gravity <sup>1</sup>	1.13	g/cm³	ISO 1183
Melt Mass-Flow Rate (MFR) (230°C/2.16 kg)	0.70	g/10 min	ISO 1133
Molding Shrinkage (23°C, 24 hr, 3.18 mm)	0.80 to 1.2	%	ISO 294-4
Mechanical	Nominal Value	Unit	Test Method
Mechanical Tensile Stress <sup>2</sup> (Yield, 23°C)	Nominal Value 23.0	Unit MPa	Test Method ISO 527-2
Tensile Stress <sup>2</sup> (Yield, 23°C)			
	23.0	МРа	ISO 527-2
Tensile Stress <sup>2</sup> (Yield, 23°C) Tensile Strain <sup>3</sup> (Break, 233°C)	23.0 430	MPa %	ISO 527-2 ISO 527-2
Tensile Stress <sup>2</sup> (Yield, 23°C)  Tensile Strain <sup>3</sup> (Break, 233°C)  Flexural Modulus - Chord <sup>4</sup> (23°C)	23.0 430 2240	MPa % MPa	ISO 527-2 ISO 527-2 ISO 178
Tensile Stress <sup>2</sup> (Yield, 23°C)  Tensile Strain <sup>3</sup> (Break, 233°C)  Flexural Modulus - Chord <sup>4</sup> (23°C)  Impact	23.0 430 2240	MPa % MPa	ISO 527-2 ISO 527-2 ISO 178 Test Method
Tensile Stress <sup>2</sup> (Yield, 23°C)  Tensile Strain <sup>3</sup> (Break, 233°C)  Flexural Modulus - Chord <sup>4</sup> (23°C)  Impact  Notched Izod Impact - Flow	23.0 430 2240 Nominal Value	MPa % MPa Unit	ISO 527-2 ISO 527-2 ISO 178 Test Method
Tensile Stress <sup>2</sup> (Yield, 23°C)  Tensile Strain <sup>3</sup> (Break, 233°C)  Flexural Modulus - Chord <sup>4</sup> (23°C)  Impact  Notched Izod Impact - Flow  -30°C, 3.18 mm, Injection Molded	23.0 430 2240 Nominal Value	MPa % MPa Unit	ISO 527-2 ISO 527-2 ISO 178 Test Method

Heat Deflection Temperature (0.45 MPa,			
Unannealed)	100	°C	ISO 75-2/Bf
CLTE - Flow (-30 to 100°C)	4.3E-5	cm/cm/°C	ASTM E831
Flammability	Nominal Value		Test Method
Flame Rating (3.18 mm, All Colors)	НВ		UL 94
Optical	Nominal Value		Test Method
Gardner Gloss (60°, 3180 μm,			
Thermoformed, Smooth)	20 to 40		ISO 2813
Additional Information	Nominal Value	Unit	Test Method
Heat Sag - 8 inch span, two point support			
	0.00	mm	ASTM D3769
Heat Sag - 8 inch span, two point support	0.00	mm	ASTM D3769
Heat Sag - 8 inch span, two point support (149°C, 3.20 mm)	0.00 Method A	mm	ASTM D3769
Heat Sag - 8 inch span, two point support (149°C, 3.20 mm)  NOTE		mm	ASTM D3769
Heat Sag - 8 inch span, two point support (149°C, 3.20 mm)  NOTE  1.	Method A	mm	ASTM D3769

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## Recommended distributors for this material

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